

File

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

~~Ex parte~~ WILLIAM N. BRABSTON AND
PHILIP C. MALONE

MAILED

MAY 22 1996

PAT & TM OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Appeal No. 95-2667
Application 07/8,80,414¹

ON BRIEF

Before CALVERT, LYDDANE, and McQUADE, Administrative Patent Judges.

LYDDANE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1 through 12 and 15 through 21, which are all of the claims pending in the application.

The subject matter on appeal is directed to a method of

¹ Application for patent filed May 8, 1992.

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soil reinforcement and to a soil reinforcement material. Claims 1 and 15 are exemplary of the invention and read as follows:

1. A method of soil reinforcement, comprising:
providing at least one fiber;
coating said at least one fiber with an adhesive material;

mixing said coated at least one coated fiber with the soil, thereby adding strength and cohesion to the soil and reducing erosion and shear failure in the soil.

15. A soil reinforcement material, comprising:
at least one fiber;

said at least one fiber being coated with an adhesive material which causes soil particles surrounding the fiber to bond to the fiber.

The references of record relied upon by the examiner in rejections of the claims under 35 USC 102(b) and under 35 USC 103 are:

Finn	2,789,399	Apr. 23, 1957
Finn	2,842,897	Jul. 15, 1958
Leflaive et al. (Leflaive)	4,645,381	Feb. 24, 1987
Hilterhaus et al. (Hilterhaus)	4,669,919	Jun. 2, 1987
Freed	4,790,691	Dec. 13, 1988
Sasahara	4,936,711	Jun. 26, 1990

Claims 15 through 17 and 19 stand rejected under 35 USC 102(b) as being anticipated by Finn '897.

Claim 18 stands rejected under 35 USC 103 as being unpatentable over Finn '897 in view of Sasahara.

Claim 20 stands rejected under 35 USC 103 as being unpatentable over Finn '897 in view of Leflaive.

Claim 21 stands rejected under 35 USC 103 as being

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unpatentable over Finn '897 in view of Sasahara and Hilterhaus.

Claims 1 and 4 through 12 stand rejected under 35 USC 103 as being unpatentable over Freed in view of Finn '399.

Claims 2 and 3 stand rejected under 35 USC 103 as being unpatentable over Freed in view of Finn '399 and Leflaive.

Rather than reiterate the examiner's statement of the above rejections and the conflicting viewpoints advanced by the examiner and the appellants, we refer to pages 3 through 8 of the examiner's answer and to pages 5 through 11 of the appellants' brief (Paper No. 14, dated August 30, 1994) for the full exposition thereof.

OPINION

At the outset, we note that appellants have chosen not to argue the patentability of dependent claims 2, 8, 4 through 12, 16 through 18 and 21 with any reasonable specificity. Accordingly, these claims stand or fall with the claims from which they depend. See In re Nielson, 816 F.2d 1567, 2 USPQ2d 1525 (Fed. Cir. 1987). We note that 37 CFR 1.192(c)(6) requires that the argument specify the errors in the rejection including any specific limitations in the rejected claims which are not described in the prior art relied on.

Our evaluation of the patentability issues raised in this appeal has included a careful assessment of appellants' specification and claims, the applied prior art, and the

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respective positions advanced by the appellants and the examiner. With respect to the applied references, we have considered all of the disclosure of each reference for what it would have fairly taught one of ordinary skill in the art. See In re Boe, 355 F.2d 961, 148 USPQ 507 (CCPA 1966). Additionally, we have taken into account not only the specific teachings of each reference, but also the inferences which one skilled in the art would have reasonably been expected to draw from the disclosure. See In re Preda, 401 F.2d 825, 159 USPQ 342 (CCPA 1968). On the basis of the knowledge and level of skill in the art at the time of appellants' invention, as reflected by the applied references, it is our conclusion that the examiner's rejections of claims 15 through 17 and 19 under 35 USC 102(b) and of claims 18, 20 and 21 under 35 USC 103 are well founded but that the examiner's rejections of claims 1 through 12 under 35 USC 103 are not. Our reasoning for this determination follows.

Considering first the examiner's rejection of claims 15 through 17 and 19 under 35 USC 102(b), we initially observe that an anticipation under § 102(b) is established when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of a claimed invention. See RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 221 USPQ 385 (Fed. Cir. 1984), cert. dismissed sub nom., Hazeltine Corp. v. RCA Corp., 468 U.S. 1228 (1984).

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Additionally, the law of anticipation does not require that the reference teach what the appellants are claiming, but only that the claims on appeal "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference. See Kalman v. Kimberly Clark Corp., 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983) cert. denied, 465 U.S. 1026 (1984) (and overruled in part on another issue) 775 F.2d 1107, 227 USPQ 577 (Fed. Cir. 1985).

With this as background, we observe that the patent to Finn '897 discloses a fiber mulch mat formed from fibers of "straw, hay or other fibre" (column 2, lines 54-55) that are "spotted at random with adhesive" (column 2, lines 28-29) which adhesive "may be asphalt, varnish, phenol formaldehyde resins in liquid tacky form" (column 2, lines 56-57). Since the mulch mat is utilized to cover soil "where it is necessary to obtain grass growth to minimize or prevent erosion by water or wind" (column 2, lines 18-20), the mulch mat of the Finn '897 patent can be considered a "soil reinforcement material" as broadly claimed which comprises at least one fiber coated with an adhesive material as recited in appealed claim 15. It is apparent that any soil particles surrounding the fiber would inherently bond to the adhesive coating on the fibers. Therefore, we shall sustain the examiner's rejection of claim 15 under 35 USC 102 (b), along with the rejection of claims 16, 17 and 19 under 35 USC 102(b)

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and the rejection of claims 18 and 21 under 35 USC 103 that have not been separately argued and fall therewith.

The appellants have argued on page 5 of the brief that

[t]he major difference between applicants' invention and FINN # 897 is FINN # 897 does not teach applicants' presaturation of a fiber with a coating (adhesive) to obtain a continuous coating that insures the maximum bonding that is obtained between the soil and the entire length of the fiber. It is submitted the FINN # 897 reference and its teachings are not capable of altering the engineering properties of the soil as applicants invention. [emphasis in original]

These arguments, however, are not commensurate with the scope of the above noted claims inasmuch as none of these claims requires "presaturation," a "continuous coating," or "altering the engineering properties of the soil." It is well settled that features not claimed may not be relied upon in support of patentability. See In re Self, 671 F.2d 1344, 213 USPQ 1 (CCPA 1982).

With respect to the rejection of appealed claim 20 under 35 USC 103 based on the combined teachings of Finn '897 and Leflaive, the examiner has taken the position that one having ordinary skill in the art would have found it obvious to replace the multiple fibers utilized in the mulch mat of Finn '897 with a single continuous fiber as taught by Leflaive to provide enhanced efficiency and simplicity in installing the mat. We agree. It is our opinion that the examiner has properly applied the test

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for obviousness set forth in In re Young, 927 F.2d 588, 18 USPQ2d 1089 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981), which is what the combined teachings of the references would have suggested to those of ordinary skill in the art, and we shall therefore sustain the examiner's rejection of claim 20 under 35 USC 103.

Appellants have argued that the proposed combination of the teachings of Finn '897 and Leflaive is improper because there was no teaching or suggestion to make the proposed combination nor any reasonable expectation of success. We note that to justify combining reference teachings in support of a rejection under 35 USC 103 it is not necessary that a device shown in one reference is capable of being physically inserted into the device shown in the other or that the prior art suggest expressly the changes or possible improvements the appellants have made. It is only necessary that knowledge clearly present in the prior art was applied. In re Keller, supra; In re Sernaker, 702 F.2d 989, 217 USPQ 1 (Fed. Cir. 1983). In fact, the knowledge pertaining to the art, including an understanding of the principles and application of the prior art elements of the claimed invention, may lead an artisan of ordinary skill to combine the relevant teachings. Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 297 n.24, 227 USPQ 657, 667 n.24 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986). Furthermore, the

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motivation to combine can arise from the knowledge that the prior art elements will perform their expected functions to achieve their expected results when combined for their common known purpose. See Miles Lab., Inc. v. Shandon Inc., 997 F.2d 870, 27 USPQ2d 1123 (Fed. Cir. 1993), cert. denied, 62 U.S.L.W. 3492, 114 S. Ct. 943 (1994). It is our opinion that the examiner has properly applied only knowledge clearly present in the prior art as evidenced by the patents to Finn '897 and Leflaive in the rejection of claim 20, and that an understanding of the principles of Finn '897 and Leflaive as to the respective uses of the fibers thereof would have led an artisan of ordinary skill to combine the relevant teachings thereof. We thus find the rejection of claim 20 under 35 USC 103 to be proper.

We do not, however, find the requisite motivation to combine the teachings of Freed and Finn '399 as applied by the examiner in the rejections of claims 1 and 4 through 12 under 35 USC 103. We agree with the examiner that Freed discloses a method of soil reinforcement utilizing fibers mixed with soil to add strength and cohesion to the soil. However, the fibers are not disclosed as having any adhesive coating. Although Finn '399 does disclose a method of protecting soil by applying a layer of adhesive coated fibers to the soil surface (column 2, lines 53-61) and covering the layer with a mixture of sand and adhesive to cause the sand to adhere and form a layer on top of the fiber

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layer (column 2, line 68 through column 3, line 9), we find nothing in either of these references to suggest that fibers to be mixed with soil should have an adhesive applied thereto in the manner proposed by the examiner. As stated in W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed. Cir. 1983),

[t]o imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.

It is our conclusion that the only reason to combine the teachings of Freed and Finn '399 in the manner proposed by the examiner results from a review of appellants' disclosure and the application of impermissible hindsight. Thus, we cannot sustain the examiner's rejections of appealed claims 1 and 4 through 12 under 35 USC 103 based on the combined teachings of Freed and Finn '399. We have also considered the additional teachings of Leflaive as applied in the rejection of claims 2 and 3 under 35 USC 103 but we find nothing therein to overcome the deficiencies of the basic combination of Freed and Finn '399, and we cannot sustain the rejection of these claims either.

Accordingly, the decision of the examiner rejecting claims 15 through 17 and 19 under 35 USC 102(b) and rejecting

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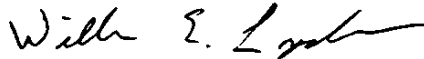
claims 18, 20 and 21 under 35 USC 103 is affirmed, but the decision rejecting claims 1 through 12 under 35 USC 103 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136 (a).

AFFIRMED-IN-PART



IAN A. CALVERT)
Administrative Patent Judge)



WILLIAM E. LYDDANE)
Administrative Patent Judge)



JOHN P. MCQUADE)
Administrative Patent Judge)

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U.S. Army Corps of Engineers
Kingman Bldg.
Attn: CEHEC-OC
Fort Belvoir, VA 22060